

MICROCOMPUTER DIVISION Master Course in Micro Computers with Advanced Standing

THIS PROGRAM DESIGNED FOR THE STUDENT WHO HAS A BACKGROUND IN BASIC ELECTRONICS

EDUCATIONAL OBJECTIVE

This course is especially prepared for those having had previous training or experience in Basic or Fundamentals of Electronics, and who do not wish to repeat this material, or as in the case of the student receiving educational assistance by the Veterans Administration, would not otherwise be permitted to enroll in NTS courses #1 or #2.

This is ideally suited for NTS graduates or graduates from other schools who have had training in radio, or B/W TV or Color TV servicing, but who have not had digital electronics training or experience.

This course provides the student with an understanding of the concepts, functions and applications of microcomputers, and micro-processors, in particular the Z80 micro-processor, and the language (BASIC) need to operate and control micro-computers.

All material is covered from the viewpoint of the servicing, maintenance and installation technician.

CAREER OBJECTIVES

Microprocessor technology has made the microcomputer the "standard" of today's ever-expanding Computer Market. As an NTS Microcomputer Graduate, you can be in a position to take advantage of the growing need for Microcomputer Electronics Technicians.

Microcomputer manufacturers often maintain a staff of Field Service Technicians to handle a wide variety of "on-site" peripheral repairs. Servicing usually involves isolating "suspect" circuitry, troubleshooting with programmed diagnostics, and providing preventive maintenance.

And with the continual growth of the Home Microcomputer Market, many Electronics Technicians are establishing independent microcomputer repair centers.

NTS "Career Objectives" are presented as guidatines based upon overall U.S. career trends as described in governmental publications such as the U.S. Occupational Outlook. It should be understood by the student that regional, state, or local opportunities may vary from the National average depending upon the industrial base of your community.

This Equipment is Included in Your Course — Yours to Build and Keep

(The following equipment and their construction projects are more fully described on pp: 9-13)

NTS/HEATH "ALL-IN-ONE" COMPUTER with 16K RAM:

A powerful 8-bit system based on two Z80 microprocessors. Built-in floppy disk system with more than 120K bytes of storage. Sharp screen 12-inch diagonal video terminal.

DIGITAL LOGIC PROBE: Pensized digital logic level indicator displays presence of logic levels 1 or 0. Detects pulses as short as 50 nanoseconds.

COMPU-TRAINER: NTS' own exclusive solid-state trainer teaches you how computers add, subtract and spive mathematical problems. Displays answers on output LED's. SSI and MSI integrated circuits used throughout.

SUBJECTS COVERED:

The lesson material is fully described in Course #1, pp. 10-13. Fundamentals are not reviewed. The subject matter is as follows (page numbers refer to this catalog where details are located):

| SEMICONDUCTOR TECHNOLOGY | 10 |
|--|----|
| INTRO. TO COMPUTER TECHNOLOGY | 11 |
| SEMICONDUCTOR DEVICES & CIRCUITS | 11 |
| COMPUTER & MICROCOMPUTER FUNDAMENTALS | 11 |
| EXPERIMENTING WITH COMBINA- TIONAL AND SEQUENTIAL LOGIC | 11 |
| TTL MEDIUM—SCALE MSI CIRCUITS | 11 |
| AUTOMATION | 11 |
| MICROPROCESSOR & MICROCOMPUTERS | 12 |
| MICROCOMPUTER INTERFACING | 12 |
| MICROCOMPUTER SOFTWARE | 13 |
| BASIC LANGUAGE PROGRAMMING | 13 |

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Course Capsule



MASTER COURSE IN MICROCOMPUTERS with Advanced Standing

17 KITS TO BUILD:

- H89 ALL-IN-ONE Computer with Video Display Terminal Fioppy Disk Drive and 16K Memory
- Digital Logic Probe
- ☐ Compy-Trainer

STUDY MATERIALS, KIT MANUALS AND TEXT-BOOKS covering Solid-State Electronics, Microcomputer Fundamentals, Z80 Microprocessor, Digital Logic Circuits, and programming in the BASIC LANGUAGE.

AVERAGE COMPLETION TIME: 25 months.
PREVIOUS TRAINING OR EXPERIENCE REQUIRED.

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